2010 Census Tribal Statistical Areas Program (TSAP) Verification Procedures for TSAP Participants:



Supplemental Documentation



Table of Contents

A. Background and Criteria for Tribal Statistical Areas and Boundary Features	4
A.1 Things to Consider when Delineating and Verifying Tribal Statistical Areas.	4
A.2 Tribal Census Tracts and Tribal Block Groups	5
A.3 Census Designated Places	9
A.4 Alaska Native Village Statistical Areas	
A.5 Oklahoma Tribal Statistical Areas (OTSAs) and OTSA Tribal Subdivisions.	
A.6 Tribal Designated Statistical Areas	13
A.7 State Designated Tribal Statistical Areas	14
A.8 State American Indian Reservations	15
B. Delineating Your Statistical Area with Paper Maps	18
C. Delineation Your Statistical Area with the TSAP ArcGIS Extension	21
C.1 Verifying Tribal Census Tracts	22
C.2 Verifying Tribal Block Groups	24
C.3 Verifying Census Designated Places	26
C.4 Verifying Alaska Native Village Statistical Areas	29
C.5 Verifying Oklahoma Tribal Statistical Area Tribal Subdivisions	31
C.6 Verifying Tribal Designated Statistical Areas	34
C.7 Verifying State Designated Tribal Statistical Areas	36
C.8 Verifying State American Indian Reservations	
D. Using the Extension	41
D.1 TSAP Geography Manager	
D.2 Workflow Manager	
D.3 Working with Census Blocks	43
D.4 Assigning and Unassigning Geography to and from Your Area	44
D.5 Splitting Tribal Census Tracts and Tribal Block Groups by Block Selection	
D.6 Splitting Blocks with Existing Line Features	
D.7 Splitting Blocks with New Line Features	
D.8 Line Attributes Tool	
D.9 Merging Tracts and Block Groups	
D.10 Updating Type Attributes for Tribal Tracts and Tribal Block Groups	
Appendices	
Appendix 1 – Regional Census Center's Contact Information	58

Acronyms for Tribal Statistical Areas Program

ACS American Community Survey

AIA American Indian area

AIAN American Indian and Alaska Native

AIR American Indian Reservation

ANA Alaska Native area

ANRC Alaska Native Regional Corporation ANVSA Alaska Native village statistical area BAS Boundary and Annexation Survey

BDP Block Definition Project

CD Compact disk-read only memory

CDP Census designated place

ESRI Environmental Systems Research Institute

FTP File Transfer Protocol

GIS Geographic information system

HU Housing units

ORTL Off-reservation trust lands

OTSA Oklahoma Tribal Statistical Area

PC Personal computer

RCC Regional census center (U.S. Census Bureau, Field Division)

SDTSA State Designated Tribal Statistical Area
TDSA Tribal Designated Statistical Area
TSAP Tribal Statistical Areas Program

Review of Delineation Criteria, Guidelines and Procedures

The following supplementary documentation is drawn from information provided to Tribal Statistical Area Program (TSAP) participants during the delineation phase of the program in January 2009. Although the Census Bureau anticipates participants will make only minor or no corrections to their statistical areas during the verification phase, if more significant corrections are required, participants should follow the same procedures for submitting the corrected boundaries as were followed during the delineation phase. Participants should strive to ensure that all criteria and guidelines associated with the tribal entity they are delineating are met, and that the boundary corrections are clear. To that end, participants should refer to Section A of this supplementary documentation for background and criteria on the various tribal statistical areas. Section B details procedures for delineating areas on paper maps, and Sections C and D provide procedures for submitting boundaries using the TSAP ArcGIS extension tool, with Section D focused specifically on the tools and functions of the extension. If participants require more detail than what is available in this supplementary documentation, they should refer to the procedures provided to them during the delineation phase. These procedures can be accessed from the TSAP website at http://www.census.gov/geo/www/tsap2010/tsap2010_gandda.html, or by calling the RCC. (See Appendix 1 for RCC contact information.)

A. Background and Criteria for Tribal Statistical Areas and Boundary Features

A.1 Things to Consider when Delineating and Verifying Tribal Statistical Areas

Since tribal statistical areas will also be used beyond the 2010 Census to tabulate and present period estimates from the ACS, defining officials should consider that, as a general rule, period estimates of demographic characteristics for geographic entities with small populations will be subject to higher variances than comparable estimates for geographic entities with larger populations. In addition, the Census Bureau's disclosure rules may have the effect of restricting the availability and amount of data for geographic entities with small populations. The more closely a tribal statistical area boundary relates to the distribution of tribal members and American Indians receiving governmental services from the tribe, and does not include large numbers of people and households not affiliated with the tribe, the more likely that data presented for the tribal statistical area will accurately reflect the characteristics of the intended tribal population.

Although eligible to, in a few cases a tribe may elect not to delineate a tribal statistical area if it will not provide meaningful, relevant, or reliable statistical data because the member population now resides in numerous other locations or has been completely subsumed by non-member and/or non-American Indian populations. In such instances, defining a tribal statistical area will not improve the presentation of statistical data relating to tribal members. These tribes may still be able to receive meaningful, relevant, and reliable statistical data for their tribal membership at higher levels of census geography through the characteristic of tribal affiliation.

The definition of an Alaska Native village statistical areas (ANVSAs), Oklahoma Tribal Statistical Areas (OTSAs) and OTSA tribal subdivisions, Tribal Designated Statistical Areas (TDSAs), and State Designated Tribal Statistical Areas (SDTSAs) may not necessarily include all tribal members; nor is it intended to depict land ownership, represent an area over which a tribe has any form of governmental authority or jurisdiction, or represent all of the traditional or historical areas associated with the tribe,

including areas used for subsistence activities. Representation of statistical Alaskan Native Area and American Indian Area (AIA) boundaries in Census Bureau products is solely for the purpose of data tabulation and presentation. Likewise, representation of ANVSA, OTSA, TDSA, and SDTSA boundaries in Census Bureau products does not convey or confer any rights to land ownership, government authority, or jurisdictional status.

In the AIANA list below, please refer to the italicized section listings and page forward for background and criteria pertinent to your tribal statistical area. Contact your RCC if you are unsure as to what type of statistical area you should be verifying. (See Appendix 1 for RCC contact information.)

AIANAs to be reviewed and updated include:

- Tribal census tracts Section A.2
- Tribal block groups Section A.2
- Census designated places (CDPs) Section A.3
- Alaska Native village statistical areas (ANVSAs) Section A.4
- Oklahoma tribal statistical areas (OTSAs) and OTSA tribal subdivisions Section A.5
- Tribal designated statistical areas (TDSAs) Section A.6
- State designated tribal statistical areas (SDTSAs) Section A.7
- State American Indian Reservations Section A.8
- Acceptable Features for use as Statistical Area Boundaries Section A.9

A.2 About Tribal Census Tracts and Tribal Block Groups

Tribal census tracts are delineated within federally recognized AIRs/ORTLs, and may contain one or more tribal block groups. Tribal block groups are aggregations of census blocks within a tribal census tract. Block groups provide a geographic summary unit for census block data, and represent the smallest geographic area for which data will be reported for the American Community Survey. Together these Statistical Areas make up a nested geographic hierarchy.

Tribal Census Tract and Tribal Block Group thresholds

Area Type	Threshold Type	Minimum	Optimal	Maximum
Tribal Census Tract	Population	1,200	4,000	8,000
	Housing Unit	480	1,600	3,200
Tribal Block Group	Population	600	N/A	3,000
	Housing Unit	240	N/A	1,200

The Census Bureau recommends minimum/maximum and optimal population and housing unit thresholds for tribal census tracts and tribal block groups (see Table above). In accordance with TSAP criteria, an American Indian Reservation/Off Reservation Trust Land (AIR/ORTL) must have population equal to or greater than 2,400 or a housing unit count equal to or greater than 960 to delineate more than one tribal census tract. To delineate more than one tribal block group an AIR/ORTL must have population equal to or greater than 1,200 or a housing unit count equal to or greater than 440. If an AIR/ORTL lacks the population/housing unit count to delineate more than one tribal census tract/tribal block group the Census Bureau has delineated one tribal census tract and tribal block group coextensive with the entire AIR/ORTL. These thresholds apply to the entire population living on, and housing units

existing within, the AIR/ORTL – not only American Indians or Alaska Natives, and not only tribal members. These thresholds do not take into account and do not include Tribal members that live outside the boundaries of the AIR/ORTL. These thresholds are in keeping with those established for the Participant Statistical Areas Program (PSAP) and were determined based on comprehensive consultations with statisticians and demographers regarding data accuracy and privacy concerns. Areas delineated with population or housing counts below these thresholds may not have data released due to data disclosure prevention. Areas above these maximum thresholds may lose the data richness and usability that may be attained with the optimal thresholds.

Tribal Census Tracts and Tribal Block Groups vs. Standard Census Tracts and Standard Block Groups

Census tracts are the oldest and one of the most utilized statistical geographic entities for which the Census Bureau tabulates data. The primary purpose of census tracts is to provide a set of nationally consistent small, statistical geographic units, with stable boundaries, that facilitate analysis of data across time. Standard census tracts always nest within states and counties. Standard block groups are subdivisions of standard census tracts and always nest within standard census tracts. Standard block groups provide the geographic framework within which the Census Bureau defines and numbers census blocks, with the block group number serving as the first digit for each census block in the block group.

Tribal census tracts and tribal block groups are conceptually similar and equivalent to standard census tracts and block groups. They recognize the unique statistical data needs of federally recognized American Indian tribes by providing meaningful, relevant, and reliable data for small geographic areas within the boundaries of federally recognized AIRs and/or ORTLs. The delineation of tribal census tracts and tribal block groups allows for an unambiguous presentation of census tract and block group level data specific to an AIR and/or ORTL, without the imposition of state or county boundaries, which might artificially separate American Indian populations located within a single AIR and/or ORTL. To this end, tribal census tracts and tribal block groups may cross county or state boundaries, or both.

For the 2010 Census, tribal census tracts and tribal block groups will be for the first time identified as a geographic framework completely separate from standard census tracts and standard block groups. With the development of an entirely separate tribal geographic framework, tribal participants had greater freedom to begin their delineations from scratch without need to consider compatibility with Census 2000 tracts and block groups. Aside from the intent presented in the previous paragraph the identification of tribal census tracts and tribal block groups for the 2010 Census also seeks to eliminate data issues associated with previous censuses, so that for the 2010 Census more census tracts and block groups, both tribal and standard, will meet the population and housing unit thresholds. The separation of tribal and standard geographic frameworks will apply to data tabulation products, as well as to geographic information products.

While there will be a separate hierarchy for standard and tribal census tracts and block groups in 2010, there will only be one set of 2010 tabulation blocks. Tabulation blocks are the smallest geographic unit for which the Census Bureau tabulates decennial census data. Tabulation blocks will be numbered with a 4-digit code, the first digit being the number of the standard block group in which it nests. For example, tabulation block 1001 is in standard block group 1 and block 2001 is in standard block group 2. Because census blocks will be numbered within standard block groups and tribal block groups will be

identified uniquely from standard block groups, there will not be a relationship between tribal block group identifiers and census block numbers. Thus, tribal block group A might contain census blocks numbered in different "thousand" ranges (e.g., blocks 1001, 2001, and 3001).

Special Land Use Tribal Census Tracts and Tribal Block Groups

To recognize and distinguish the special uses of some parcels of land, the Census Bureau allows for the definition of special land use tribal census tracts or block groups. Specific areas such as ceremonial grounds, historic sites, and parks can be identified as special land use tribal census tracts or tribal block groups. These areas must have an official name, generally have little or no residential population or housing units (or meet the non special land use tribal census tract or tribal block group population and housing unit thresholds) and must be contiguous. If located in a densely populated urban area, a special land use tribal census tract or tribal block group must have an area measurement of approximately one square mile or more. If delineated completely outside an urban area, a special land use tribal census tract or tribal block group must have an area of approximately 10 square miles or more. Participants are **not** required to delineate special land use tribal census tracts or tribal block groups.

The Census Bureau recognizes that some special land use areas not intended for residential population, such as parks, may contain some population, such as caretakers or the homeless. Our intent is to allow for the delineation of parks and other special land use areas as separate tribal census tracts and therefore we will accept such areas as special land use tribal census tracts even if some, but very little, residential population is present.

An Explanation of the Tribal Census Tract and Tribal Block Group Code Labels

When working with new or existing tribal census tracts and tribal block groups you will respectively notice their ten and eleven digit identification code labels. For raw data work processes such as the delineation and verification tasks you are accomplishing with the TSAP Extension, the entire code for both tribal census tracts and tribal block groups are used when labeling features. The entire code may not be present on other Census Bureau data products including the American Fact Finder website. Please refer to the legend on paper maps to see how the codes are portrayed on those products.

Tribal Census Tract example

4625<mark>T004</mark>00

The first four characters identify the American Indian Area (AIA). The middle four characters beginning with "T" identify the tribal census tract. The last two characters are a tract suffix that will identify split tracts.

Tribal Block Group example

Tribal block groups add to the tribal census tract code one additional character. The example below is a code for tribal block group "A" which is within the tribal census tract "T004" of AIA 4625.

4625T00400A

The criteria for tribal census tracts are:

- 1. Tribal census tracts may not cross AIR/ORTL boundaries.
- 2. The entire land and water area of an AIR/ORTL must be covered by one or more tribal census tracts.
- 3. Tribal census tracts will be labeled by a "T" followed by three digits, beginning with "T001, T002, etc."

Guidelines for delineating tribal census tracts are:

- 1. Optimally, census tracts should have 4,000 people or 1,600 housing units. Meeting or exceeding the optimum thresholds will help improve the reliability of sample data for tribal census tracts.
- 2. Each tribal census tract must encompass <u>at least</u> 1,200 people or at least 480 housing units unless it is flagged as a special land use tract or the AIR/ORTL itself has less than 1,200 people or 480 housing units.
- 3. A tribal census tract must comprise a reasonably compact and contiguous land area.
- 4. Tribal census tract boundaries should follow visible and identifiable features.
- 5. Noncontiguous tribal census tracts are permitted only where a contiguous area or inaccessible area would not meet population or housing unit count requirements for a separate tribal census tract, in which case the noncontiguous or inaccessible area must be combined with a proximate tribal census tract. For example, if your reservation includes noncontiguous pieces, and each piece does not have enough population or housing to qualify for its own tribal census tract, one tribal census tract may be delineated instead.

The criteria for tribal block groups are:

- 1. Tribal block groups must not cross tribal census tract boundaries.
- 2. Because tribal census tracts must cover the entire area of each AIR/ORTL, by definition, tribal block groups also must cover the entire area of each AIR/ORTL.
- 3. Tribal block groups will be designated with a single capital letter from "A" through "K" (except for the letter "I"). Tribal block group identifiers must be unique within tribal census tracts.

Guidelines for delineating tribal block groups are:

- 1. Each block group must encompass at least 600 people or at least 240 housing units unless it is coextensive with a flagged special land use tract or the AIR/ORTL itself has less than 600 people or 240 housing units.
- 2. A block group must comprise a reasonably compact, contiguous land area.
- 3. Noncontiguous block groups are permitted only where a contiguous area or inaccessible area would not meet population or housing unit count requirements for a separate tribal block group, in which case the noncontiguous or inaccessible area must be combined with a proximate block group. For example, if your reservation includes noncontiguous pieces, and each piece does not have enough population or housing to qualify for its own tribal block group, one tribal block group may be delineated instead.
- 4. Block group boundaries should follow visible and identifiable features.

A.3 Census Designated Places

Census designated places (CDP) are statistical geographic entities that generally represent closely settled, unincorporated communities that are locally recognized and identified by a single name. A CDP should be composed of a mix of residential and commercial structures, and have at least some housing or population, ideally both. The purpose of delineating a CDP is the creation of a statistical area equivalent to its counterpart – an incorporated governmental unit such as a city, town, or village. CDPs may not be partially or entirely within another incorporated place or CDP, and should not be coextensive with any other Census geographic entity (i.e. tract, AIR/ORTL, etc.). The boundaries should follow visible features such as streams, roads, railroad tracks, or ridgelines whenever possible.

CDPs are delineated through both the TSAP and the Participant Statistical Areas Program (PSAP) for the 2010 Census. Federally recognized tribes with AIRs, ORTLs, or OTSAs may update or delineate new CDPs within the boundary of their reservation, trust lands, or OTSA through the TSAP. Tribes that would like to delineate CDPs for communities completely off their legal or statistical area should work through the PSAP with the primary participants for the areas in which they are interested. Contact your RCC for more information on PSAP.

The criteria for CDPs are:

- 1. CDPs cannot be coextensive with an entire AIR, ORTL, OTSA, or any other AIA.
- 2. CDPs may extend off AIRs, ORTLs, or OTSAs.
- 3. A CDP may not have the same name as an adjacent or nearby incorporated place. If the community does not have a name that distinguishes it from other nearby communities, then the community is not a distinct place and should not be submitted as a CDP.
- 4. A CDP may not be located, either partially or entirely, within an incorporated place or another CDP.
- 5. A CDP may be located in more than one county.
- 6. A CDP must not cross state boundaries.

Guidelines for delineating CDPs are:

- 1. A CDP constitutes a single, closely settled center of population that is named. To the extent possible, individual unincorporated communities should be identified as separate CDPs.
- 2. A CDP is defined to provide data for a single named locality; therefore the Census Bureau does not encourage delineating CDPs that comprise a combination of places or are identified by hyphenated names. For example, CDPs such as Poplar-Cotton Center and Downieville-Lawson-Dumont are no longer acceptable. Prior to the 2000 Census communities were sometimes combined as a single CDP in order to comply with the Census Bureau minimum population requirements. The Census Bureau's elimination of population threshold criteria has made such combinations unnecessary.
- 3. Multiple communities may only be combined to form a single CDP when the identities of these communities have become so intertwined that the communities are commonly perceived and referenced as a single place.
- 4. Multiple communities also may be defined as a single CDP when there is no distinguishable or suitable feature in the landscape that can be used as a boundary between the communities, even if the two communities still have separate identities.

- 5. A CDP must contain some population or housing units or both. Participants submitting boundaries for places with less than ten housing units may be asked to provide additional information attesting to the existence of the CDP.
- 6. CDP boundaries should follow visible features, except in those circumstances when a CDP's boundary is coincident with the nonvisible boundary of an AIR/ORTL, state, county, minor civil division (MCD), or incorporated place. A CDP boundary may follow other nonvisible features in instances where reliance upon visible features will result in overbounding of the CDP in order to include housing units on both sides of a road or street feature. Such boundaries might include parcel boundaries and public land survey system lines; fence lines; national, state, or local park boundaries; ridgelines; or drainage ditches.
- 7. The CDP name should be one that is recognized and used in daily communication by the residents of the community.
- 8. A CDP should have population during at least one entire season of the year, and have a higher housing unit and population density than surrounding areas.

A.4 Alaska Native Village Statistical Areas

An ANVSA is a statistical area that represents the relatively densely settled portion of an Alaska Native village (ANV). These are areas where residents of the defining ANV reside during at least one season of the year, and include housing, cultural, and commercial structures. Members of the defining ANV should also represent a significant proportion of the population of the ANVSA. ANVSAs are not meant to portray large unpopulated areas or the full extent of traditional lands.

The criteria for ANVSAs are:

- 1. ANVSAs delineated for the 2010 Census shall not overlap.
- 2. An ANVSA shall not completely surround the location of another ANV.
- 3. All portions of an ANVSA must be located within fifty miles of the ANV's point location.
- 4. An ANVSA shall not include more water area than land area. Large expanses of water area should be included only to maintain contiguity, to provide a generalized version of the shoreline, or if the water area is completely surrounded by land area included in the ANVSA.
- 5. The name for an ANV must match the name corresponding to the ANV point location. Name changes will only be considered if submitted in writing and signed by the highest elected official of the ANV.

Guidelines for delineating ANVSAs are:

- 1. Housing units occupied by Alaska Natives, even if seasonal, should constitute the majority of housing units within an ANVSA.
- 2. The population within an ANVSA should be majority Alaska Native and of that population, the majority should be members of the population served by the delineating ANV.
- 3. ANVSAs should be located in areas of historical and traditional significance and include land that is locally recognized as being associated with the village or group. In addition each ANVSA should include land area that contains structures such as tribal headquarters, meeting areas, cultural or spiritual landmarks, service centers and/or tribally owned stores.

- 4. An ANVSA should not extend beyond the regional boundary of the ANRC in which the ANV is located (ANRC boundary shapefiles are included on the CD).
- 5. An ANVSA should not exceed 325 square miles in area. Based on review of ANVSA boundaries from previous censuses as well as other information about ANVs and ANVSAs, the Census Bureau suggests this size as sufficient to encompass the Alaska Native population and housing associated with each respective ANVSA, but not so extensive that large amounts of non-Native population and housing are included.
- 6. An ANVSA should not contain large areas without housing or population. Specifically, an ANVSA should have a housing unit density of at least three housing units per square mile.
- 7. An ANVSA should be contiguous; that is, an ANVSA should form a single area with all territory located within a continuous boundary. This makes identification of the extent of the ANVSA easier for residents and data users, and also provides for a clearer representation of the ANVSA's boundaries on maps. An ANVSA, however, may be defined with multiple noncontiguous pieces if doing so helps avoid inclusion of population and housing not associated with the ANV.
- 8. An ANVSA's boundary shall follow visible, physical features, such as rivers, streams, shorelines, roads, trails, and ridgelines.
- 9. Officials delineating ANVSAs may use a nonvisible line as an ANVSA boundary only if acceptable boundary features are not available. For example, an ANVSA boundary may follow the nonvisible, legally defined boundaries of an ANRC, borough, or city.
- 10. If the ANVSA boundary follows a governmental unit boundary, the Census Bureau will adjust the ANVSA boundary to continue to follow that boundary should it change due to correction, annexation or detachment.

A.5 Oklahoma Tribal Statistical Areas (OTSAs) and OTSA Tribal Subdivisions

OTSA boundaries represent statistical entities identified and delineated by the Census Bureau in consultation with federally recognized American Indian tribes that have no current AIR, but that had a former AIR in Oklahoma. The boundary of an OTSA is that of the former AIR. Therefore, the Census Bureau does not expect any changes to OTSA boundaries. Upon review of your OTSA boundary if you identify an error please contact the Kansas City RCC (see *Appendix 1* for contact information).

Off Reservation Trust Lands

The Census Bureau is aware that federally recognized tribes in Oklahoma have trust lands throughout the state. As part of the TSAP, a tribe may choose to have the Census Bureau tabulate data for its ORTL for the 2010 Census. This can be implemented if the tribe can supply an acceptable Geographic Information System file or map(s) and the required supporting legal documentation for the Census Bureau to use to record the ORTL accurately. If a tribe chooses to submit their ORTL to the Census Bureau, the tribe's ORTL will be excluded from the OTSA. The trust land areas will then become part of the universe of legally defined entities updated and maintained through the Census Bureau's annual Boundary and Annexation Survey (BAS). Contact your RCC for more information on reporting ORTLs and the BAS.

Joint Use Areas

For previous censuses, the Census Bureau allowed the boundaries of OTSAs to deviate somewhat from the corresponding former AIR boundaries when requested by a tribe and supported by available demographic data. Such deviations affect the delineation and identification of other tribes' OTSAs,

resulting in area being associated with multiple OTSAs. These areas with multiple relationships were defined as separate geographic entities and identified as "joint use area OTSAs" for Census 2000. In response to comments received from data users, especially with regard to federal laws and programs requiring the use of the former AIR boundaries rather than OTSA boundaries, the Census Bureau would like TSAP participants to work to dissolve the existing OTSA joint use areas. If tribes can not come to agreement on how to eliminate these areas, we will allow the existing Census 2000 Joint Use Areas to remain, but will not approve any new ones for 2010. Four joint use area OTSAs were created for Census 2000:

- Kiowa-Comanche-Apache-Ft. Sill Apache-Caddo-Wichita-Delaware
- Creek-Seminole
- Kaw-Ponca
- Miami-Peoria.

The criteria for OTSAs are:

- 1) An OTSA must contain some American Indian population and housing.
- 2) An OTSA may not overlap with any other AIA at the same level of the geographic hierarchy.
- 3) An OTSA may not include more water area than land area.
- 4) OTSAs should be bounded by visible features such as roads, rivers, streams, shorelines, trails and ridgelines.
- 5) The Census Bureau will evaluate the submitted name of each OTSA to ensure that the name is clearly distinguishable from the name of any other OTSA.
- 6) OTSAs must be located completely within the current boundaries of the state of Oklahoma.
- 7) An OTSA may not completely surround another legal or statistical area at the same level of the geographic hierarchy.
- 8) The name for each OTSA is determined by the tribe or tribes (in conjunction with the Census Bureau) that are responsible for delineating each OTSA. The Census Bureau will revise any name submitted for a geographic entity if it is determined that the criteria listed below were not applied properly. The name of an OTSA must reflect one or more of the following conditions:
 - a) The tribe or tribes associated with the former AIR represented by the OTSA;
 - b) Tribes that have historically resided within the area of the OTSA;
 - c) Tribes that have significant population currently residing within the OTSA; and/or
 - d) The name(s) of the tribe(s) commonly associated with the area encompassed by the OTSA.

Guidelines for delineating OTSAs are:

- 1. To the extent possible, OTSA boundaries identified for the 2010 Census should be the same as those delineated for Census 2000.
- 2. OTSAs should follow the last legal boundaries established for their former AIR.
- 3. Tribes should strive to eliminate overlapping OTSA boundaries that resulted in the Census 2000 joint use area OTSAs.

OTSA Tribal Subdivision Criteria and Standards

OTSA tribal subdivisions are statistical entities that represent internal units of self government or administration. Internal units may include areas that serve social, cultural, and/or legal purposes for a tribal government. Please report the lowest level of administrative units that are available. For example, if the tribe uses several levels of nesting geography, such as tribal council management districts that wholly contain grazing districts, the grazing districts should be reported to the Census Bureau as the tribal subdivision boundaries, as they are the smallest and lowest level of units used in that hierarchy. If a similar hierarchical structure exists within the governmental units being reported as tribal subdivisions, please delineate the lowest level unit in the steps below.

Guidelines for delineating OTSA Tribal Subdivisions are:

- 1. Tribal subdivisions should represent units of self-government or administration within an AIR or ORTL for a federally recognized tribe.
- 2. OTSA Tribal subdivisions are intended to completely cover an OTSA, or at least the major contiguous portion of an OTSA.
- 3. The name of each tribal subdivision must reflect its name, as cited in recent tribal legal documentation and/or used by the tribal government for administrative purposes.
- 4. If an OTSA consists of multiple, noncontiguous parts, the tribal subdivisions within them will be noncontiguous.

A.6 Tribal Designated Statistical Areas

A TDSA is a statistical geographic entity identified and delineated by a federally recognized American Indian tribe that does not currently have a reservation and/or off-reservation trust land. A TDSA is intended to be comparable to the AIRs within the same state or region, especially those for tribes that are of similar size. Your TDSA should encompass a compact and contiguous area that contains a concentration of individuals who identify with your American Indian tribe and within which there is structured, organized tribal activity. Criteria and guidelines for TDSAs are listed below:

The criteria for TDSAs are:

- 1. A TDSA must contain some American Indian population and housing.
- 2. A TDSA may not overlap with any other AIA at the same level of the geographic hierarchy.
- 3. A TDSA may not completely surround another legal or statistical AIA at the same level of the geographic hierarchy.
- 4. A TDSA may not include more water area than land area.
- 5. Officials delineating TDSAs may only add nonvisible lines as a boundary if other acceptable boundary features, such as roads, rivers, streams, shorelines, trails and ridgelines, are not available and they aid in a TDSA meeting other specific, delineation criteria and/or guidelines.
- 6. TDSAs may not include military areas.
- 7. TDSAs may not be delineated in Hawaii, Oklahoma or Alaska, nor will those existing in Alaska continue to be recognized.

8. The name of a TDSA will be determined by the tribe or tribes, in conjunction with the Census Bureau. The Census Bureau will evaluate the submitted name to ensure that each TDSA name is clearly distinguishable from the name of any other legal or statistical AIA. The name must also reflect one of two conditions: the tribe that has the largest population currently residing within the TDSA, or the name of the tribe most commonly associated with the area that the TDSA encompasses.

Guidelines for delineating TDSAs are:

- 1. TDSAs should be comparable in area to the existing AIRs and/or ORTLs of other tribes with similar numbers of members in the same state and/or region.
- 2. American Indians should constitute a large proportion of the population within a TDSA, and of the American Indian population, the majority should be members of the delineating tribe.
- 3. As a minimum, TDSAs should have a population of 1,200 individuals or 480 housing units.
- 4. A TDSA should include an area where there is structured and organized tribal activity, including tribal headquarters, tribal service centers, meeting areas and buildings, ceremonial grounds, tribally owned commercial locations, etc.
- 5. TDSAs should not contain large areas without housing or population. A housing unit density of at least three housing units per square mile is suggested.
- 6. TDSAs should be contiguous.
- 7. Water area should be included only to maintain contiguity, to provide a generalized version of the shoreline, or if the water area is completely surrounded by land area included in the TDSA.
- 8. TDSA boundaries should follow visible, physical features such as rivers, streams, shorelines, roads, and ridgelines.
- 9. TDSA boundaries may follow the nonvisible, legally defined boundaries of AIRs, ORTLs, states, counties, or incorporated places.

A.7 State Designated Tribal Statistical Areas (SDTSAs)

Called State Designated American Indian Statistical Areas (SDAISAs) in Census 2000, SDTSAs are created to provide state-recognized American Indian tribes without an AIR statistical data similar to that provided to tribes with AIRs. The entity terminology changed to adhere more closely to the similar federal tribe naming convention, tribal designated statistical areas (TDSAs). SDTSAs are identified and delineated for the Census Bureau by a governor-appointed state liaison, working in conjunction with tribal officials through the TSAP. SDTSAs generally encompass a compact and contiguous area in which there is structured or organized tribal activity and a concentration of individuals who identify with a state-recognized American Indian tribe.

The criteria for SDTSAs are:

- 1. A SDTSA must contain some American Indian population and housing.
- 2. A SDTSA may not overlap with any other AIA at the same level of the geographic hierarchy.
- 3. A SDTSA may not completely surround another legal or statistical AIA at the same level of the geographic hierarchy.
- 4. A SDTSA may not include more water area than land area.

- 5. Officials delineating SDTSAs may only add nonvisible lines such as corporate limits as a boundary if other acceptable boundary features such as roads, rivers, streams, shorelines, trails and ridgelines, are not available and they aid in a SDTSA meeting other specific, delineation criteria and/or guidelines.
- 6. SDTSAs may not include military areas.
- 7. An SDTSA for a specific tribe may be delineated in a state only if the tribe is officially recognized by the state.
- 8. The name for each SDTSA is determined by the tribe or tribes (in conjunction with the Census Bureau and the state liaison for SDTSAs) that are responsible for its delineation. The Census Bureau will evaluate the submitted name to ensure that each SDTSAs name is clearly distinguishable from the name of any other legal or statistical AIA. The name of a SDTSA must reflect one or more of the following: the tribe that has the largest population currently residing within the SDTSA; and/or the name of the tribe most commonly associated with the area encompassed by the SDTSA.

Guidelines for delineating SDTSAs are:

- 1. SDTSAs should be comparable in area to the existing AIRs and/or ORTLs of other tribes with similar numbers of members in the same state and/or region.
- 2. American Indians should constitute a large proportion of the population within a SDTSA, and of the American Indian population, the majority should be members of the delineating tribe.
- 3. A minimum population of at least 1,200 individuals or 480 housing units is suggested to help enhance reliability and availability of sample-based data.
- 4. SDTSAs should include area where there is structured and organized tribal activity, including tribal headquarters, tribal service centers, meeting areas and buildings, ceremonial grounds, tribally owned commercial locations, etc.
- 5. SDTSAs should not contain large areas without housing or population. A housing unit density of at least three housing units per square mile is suggested.
- 6. SDTSAs should be contiguous.
- 7. Water area should be included only to maintain contiguity, to provide a generalized version of the shoreline, or if the water area is completely surrounded by land area included in the SDTSA.
- 8. SDTSA boundaries should follow visible, physical features, such as rivers, streams, shorelines, roads, and ridgelines.
- 9. SDTSA boundaries may follow the non visible, legally defined boundaries of AIRs, ORTLs, states, counties, or incorporated places.

A.8 State American Indian Reservations

State American Indian reservations (State AIRs) are reviewed and updated as needed once before each decennial census to ensure a complete inventory of State AIRs for those states with state-recognized tribes that are not also federally recognized. The review should determine, solely for data collection and tabulation by the Census Bureau, the complete and current inventory and the correct attributes (names, legal descriptions, official status) and official, legal boundaries of the State AIRs in each state. The Census Bureau also accepts additions and updates to features such as roads or rivers that serve as the boundary of the State AIR.

For affected states, a governor appointed state liaison provides the name, boundary, and any associated updates for each state recognized AIR to the Census Bureau. If the State AIR official declines or defers participation, the Census Bureau will use the Census 2000 State AIR boundaries, to tabulate 2010 Census data.

State Reservation Criteria and Guidelines

State AIR boundaries and names should be reported to the Census Bureau as they exist in the legislation or treaty under which they were established. By definition, State AIR boundaries cannot cross state lines unless the AIR and tribe is separately recognized in each state. State AIRs may not include territory within federally recognized AIRs or ORTLs. Acceptance of boundary changes to State AIRs requires clear legal documentation supporting any, and all, changes involving these boundaries. The Census Bureau will identify each State AIR with the name submitted by the state liaison providing the boundary for the area. For this reason, the State AIR name should reflect the specific tribal name cited in the legal records establishing the State AIR.

A.9 Acceptable Features for use as Statistical Area Boundaries

Statistical area boundaries may follow specified legal or administrative boundaries that do not change greatly over time. A list of legal or administrative boundaries is provided below:

- American Indian reservation
- Off-reservation trust land
- Tribal subdivision
- State
- County
- County subdivision

Statistical area boundaries may also follow permanent, visible features, such as roads, perennial streams, railroads, and high-tension power lines. Permanent visible features should be easily locatable in the field by Census Bureau staff without ambiguity. The acceptable visible boundary features are:

- dam
- stream/river (perennial)
- canal, ditch or aqueduct (perennial)
- pier/dock
- runway/taxiway
- pipeline (above ground)
- powerline (above ground, high-tension)
- aerial tramway/ski lift
- natural topographic features
- cliff/escarpment
- perennial shoreline
- railroad features (main)
- carline, streetcar track, monorail, other mass transit rail
- interstate highway or primary road with limited access

- primary road without limited access, US highway, state highway or county highway, secondary and connecting roads
- local neighborhood road, rural road, city street
- service drive (usually along a limited access highway)
- alley
- permanent fencelines
- levee

Natural topographic features include the crests of well-defined mountain ridges; the rims or bases of sharply defined escarpments, cliffs, or bluffs; the position of dry ravines or arroyos; as well as other features, as long as the features are not also mimicked by another visible feature, have no housing in the vicinity, and are easily located on the ground.

Data user and Census Bureau experience has shown that some features make better boundaries than others, and the same type of feature can make an excellent boundary in one place and a poor one in another. Rivers, major canals, lakes, and other bodies of water often make good statistical area boundaries because they generally limit access from one area to another and rarely change relative location. Other features that limit access between areas, such as interstate and other major highways, railroad tracks, and the ridges of mountain ranges, also make good statistical area boundaries. In some instances, however, such a feature unifies a community, for example, a lake forming the core of a recreational housing development or a through street forming the spine of a subdivision. In these circumstances, the statistical area boundary should include the entire area of the lake or both sides of a unifying street to better encompass similar community patterns.

In general, when delineating boundaries in bodies of water represented as polygons and having area (lakes, reservoirs, bays, oceans, and wide rivers), the boundary should follow a line bisecting (running through the middle of) the water body rather than following a shoreline. Wherever possible, use an existing line in water (for example, a county line in the middle of a river) rather than adding a new line.

Officials delineating statistical AIAs may only add nonvisible lines as a boundary if other acceptable boundary features such as roads, rivers, streams, shorelines, trails and ridgelines, are not available and they aid in a statistical AIA meeting other specific, delineation criteria and/or guidelines. The Census Bureau staff will contact you if they require more information or have questions about feature updates submitted as part of our 2010 TSAP.

When establishing a boundary that is within 30 feet (10 meters) of an existing line in the Census Bureau's shapefile do not add an additional line. Instead use the existing line features wherever possible.

B. Delineating Your Statistical Area with Paper Maps

The Census Bureau suggests the following procedures for delineating tribal statistical areas and for suggesting Census 2010 Block Boundaries:

- 1. Compare your source materials with the Census Bureau's maps.
- 2. If after reviewing our maps, you believe that the boundary of your tribe's federal reservation or trust land is inaccurate as portrayed on the Census Bureau's maps, please contact your RCC (contact information is found in Appendix 1).
- 3. If you are satisfied with how the *tribal statistical areas* (i.e. tribal census tracts, tribal block groups, Alaska Native Village Statistical Areas (ANVSAs), Oklahoma Tribal Statistical Areas (OTSA), OTSA tribal subdivisions, Tribal Designated Statistical Areas (TDSAs), State Designated Tribal Statistical Areas (SDTSAs), and Census Designated Places (CDPs)) are portrayed on the map, and you do not wish to identify any features for use as 2010 census block boundaries, fill out the enclosed verification *No Changes* postcard and return it the Census Bureau by mail.
- 4. If you need to correct or delineate new *tribal statistical areas*, annotate the revised or new boundary on the maps provided, remembering to name and number updates and revisions. Delete an existing boundary by drawing "X"s along that boundary using the appropriate colored pencil. The Census Bureau requests that participants use a pencil with
 - blue lead to annotate tribal census tract boundaries,
 - orange lead to annotate tribal block group boundaries,
 - purple lead to annotate Oklahoma Tribal Statistical Areas (OTSAs), and
 - red lead to annotate Alaska Native Village Statistical Areas (ANVSAs), tribal census designated places (CDPs), Tribal Designated Statistical Areas (TDSAs), and State Designated Tribal Statistical Areas (SDTSAs). CDPs delineated to share boundaries with another statistical area should use red circles to depict the CDP boundary.

Any corrections to delineations or the delineation of new entities are required to meet tribal statistical area criteria. The criteria for your eligible entities are described in Section A of this supplementary documentation. If your corrections or new delineations violate any of the criteria, please provide a written justification for the delineation. Justifications can be written directly on the map, or on a separate sheet of paper you can attach to the map. Make sure it is clear which entity violates the criteria, and what criterion is violated. For example, possible justification for not meeting population or housing unit thresholds might include the following:

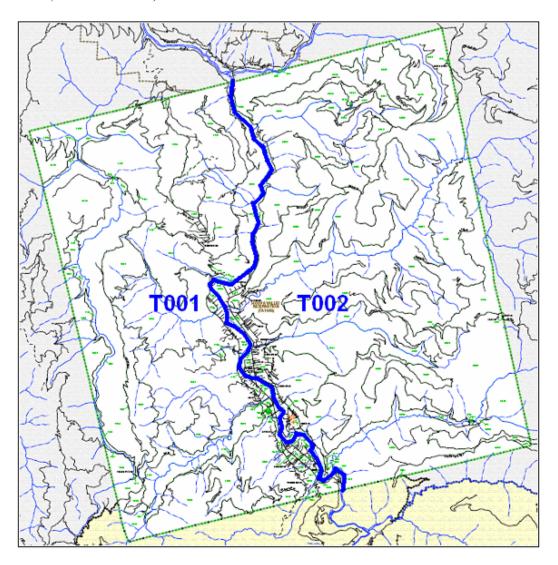
- a. Census Bureau 2000 population or housing unit counts are incorrect
- b. New housing units built since 2000; will now meet threshold
- c. Population has increased since 2000; will now meet threshold

When adding a feature that will be used as a boundary of a tribal statistical area, use a **black** lead pencil to add and label the feature and use the appropriate colored pencil as described above to annotate the feature as a boundary. If a feature is incorrectly located, mislabeled or distorted on the Census Bureau's maps to the extent that you cannot correctly delineate a boundary using that feature, please draw your boundary *following the problematic feature* and using the appropriate colored pencil. Also, be sure to contact your RCC to describe the location and nature of the problem.

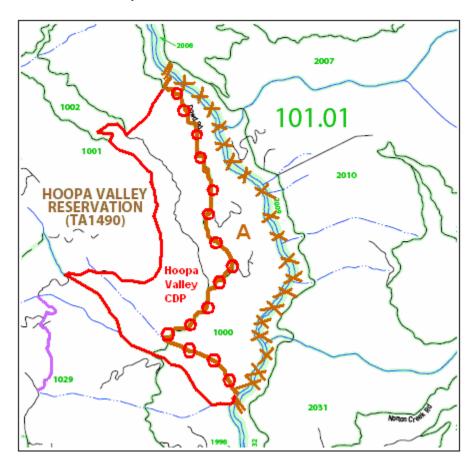
Paper Map Delineation Examples

(For examples of delineating other tribal statistical areas, please see the delineation participant procedures, available at http://www.census.gov/geo/www/tsap2010/tsap2010_gandda.html)

In this example, a reservation that previously had only one tribal census tract (101.01) has now been divided into two (T001 and T002).



In this example, the tribal block group boundary has been corrected. The old boundary has been crossed out and the new boundary has been marked using an orange pencil. A CDP has been created and where the two statistical areas now share a boundary, the CDP is delineated using red circles. Also, a road in the lower left hand corner has been marked with a purple pencil, showing that it is to be held as a 2010 tabulation block boundary.



C. Delineating Your Statistical Area with the TSAP ArcGIS Extension

General Guidance

The TSAP extension is designed to assist participants with the review and verification of the American Indian and Alaska Native areas (AIANAs) included in the 2010 Census TSAP. The eligibility to delineate specific AIANAs was presented in Section 2 of the original TSAP Extension guidelines, found on the enclosed CD (2010_TSAP_Extension_guidelines.pdf). This section is intended to offer guidance in the verification process for each type of AIANA through an introduction and an example delineation scenario. The extension's tools and commands described in scenarios are more thoroughly defined in Section D. In the AIANA list below, please refer to the italicized section listings and page forward for guidance in the verification of your tribal statistical area.

AIANAs to be reviewed and updated include:

- Tribal census tracts Section C.1
- Tribal block groups Section C.2
- Census designated places (CDPs) Section C.3
- Alaska Native village statistical areas (ANVSAs) Section C.4
- Oklahoma tribal statistical areas (OTSAs) and OTSA tribal subdivisions Section C.5
- Tribal designated statistical areas (TDSAs) Section C.6
- State designated tribal statistical areas (SDTSAs) Section C.7
- State American Indian Reservations Section C.8

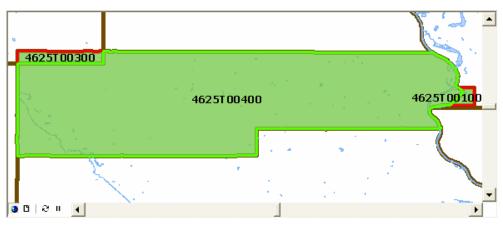
The TSAP extension has been developed for ESRI's ArcGIS software. Therefore as with any ArcMap project, additional spatial datasets that may be useful in your verification work for reference, such as land use, zoning, aerial imagery, etc. may be added at anytime to supplement your TSAP projects. The TSAP extension does not offer any custom tools for adding supplemental datasets to the data frame, rather you must utilize the existing *Add Data* command found on ArcGIS's *Standard* toolbar.

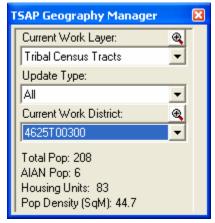
All data supplied by the Census Bureau for use with the TSAP extension are delivered in geographic projection, North American Datum 1983 (NAD83). The TSAP data are supplied in shapefile format and is thus not topologically integrated. The Census Bureau requests that tribal participants *maintain the shapefile format and projection* throughout all use of the TSAP extension from review and delineation to final submittal. It is necessary to maintain the delivered shapefile and projection format because all submitted delineations will be incorporated by the Census Bureau into a seamless topologically integrated spatial database. The *Census Bureau provided shapefiles must be used for the actual delineation and verification work*. All delineations submitted in other file formats and/or projections will cause a delay in processing and acceptance and may not be used by the Census Bureau.

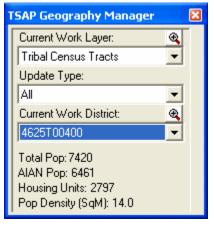
If you believe the boundary for your reservation or off-reservation trust land is not correct, please contact the Census Bureau RCC (see *Appendix 1* for your RCC's contact information).

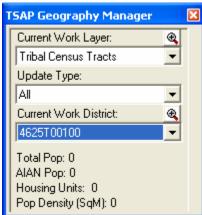
C.1 Verifying Tribal Census Tracts

Review the tribal tract boundaries and inspect the location and spatial extent of all existing statistical areas as well as the corresponding demographic data reported from the 2000 Census. Demographic data can easily be found using the TSAP Geography Manager tool. Select Tribal Census Tracts as your work layer and All as your update type. In the Current Work District pull-down menu scroll through the available tracts. Notice that as each is selected, demographic attributes are displayed beneath the Current Work District within the TSAP Geography Manager. Tracts falling within or outside the population and/or housing unit thresholds are symbolized accordingly (red outline: outside thresholds, green outline: within thresholds). It should again be noted that if your tribe is eligible for only one tribal census tract, the Census Bureau has already delineated a single tribal census tract coextensive to your AIR/ORTL boundary. In the example at the top of the next page, an AIR with three census tracts is depicted. The demographic attributes for each tract are present in the three following screenshots of the TSAP Geography Manager on the next page.

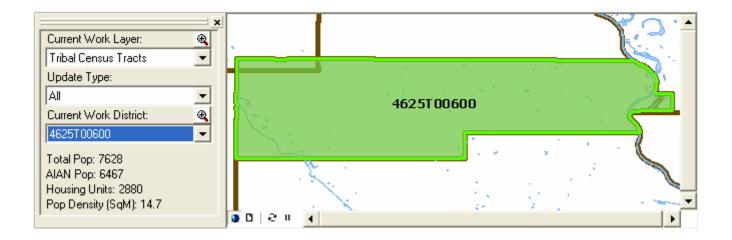








Two tracts (outlined in red) fall outside the population and housing unit thresholds required for tribal census tracts. Suppose the participant had intended for there to be only one tract. This can be accomplished by merging the three tracts into one new tract. This is accomplished by using the *Merge Tool* found on the *TSAP Tools* toolbar. A new tribal census tract, 4625T00600, with correspondingly summarized demographic data is formed from the merging process (see image below).



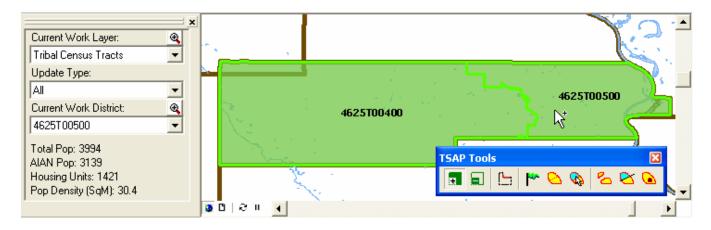
Creating New Tribal Census Tracts

Now suppose the participant had intended to create two new tribal census tracts from the one existing tract. When creating new tribal census tracts, it is recommended that the *Assign Geography* tool be used to maintain the nesting relationships between the tracts and the AIR/ORTL. Not using this method of delineation may result in blocks that are unassigned to a tribal census tract, which will slow the final quality control process.

Begin the delineation by selecting *Tribal Census Tracts* as your work layer and *All* as your update type. In the *Current Work District* pull-down menu select *New District*, then select the appropriate *New District Parameters* and click OK (see images below).



The new tribal census tract, assigned with a new tribal tract number, is then created and displayed in the *Current Work District*, and you may begin adding area. Using the *Assign* Geography tool, select and add census blocks until a tribal census tract is delineated (see image below).

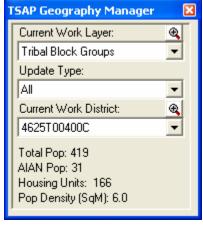


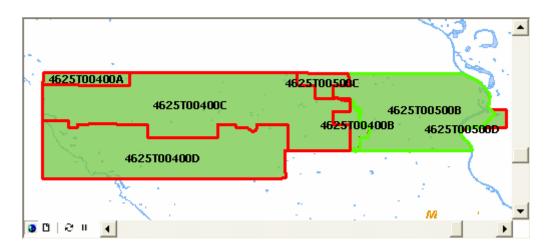
The example above presents two tribal census tracts that both meet all necessary criteria. If a tract falls below the population or housing unit thresholds (tracts below thresholds will be shown in red), select the tract in the *Current Work District* and again use the *Assign Geography* tool add area until all tracts meet threshold criteria.

C.2 Verifying Tribal Block Groups

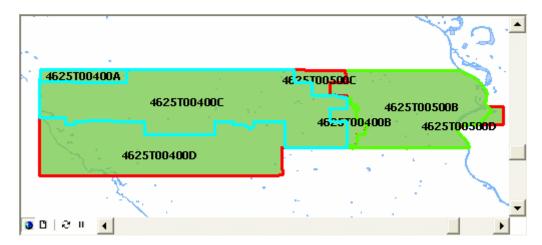
As with tribal census tracts, your review should begin with an inspection of the current Census block groups and the corresponding demographic data reported for the 2000 Census. Using the *TSAP Geography Manager* tool, select *Tribal Block Groups* as the current work layer, and *All* as the update type. In the *Current Work District* pull-down menu, scroll through and select any block group to see its demographic data. An example block group selection using the *TSAP Geography Manager* is shown in the image to the right.

In the following example, all of the reservation's block groups are displayed. Block groups outlined in red are outside the established population and/or housing unit thresholds while block groups outlined in green are within. The reservation is displayed by a transparent green shade.



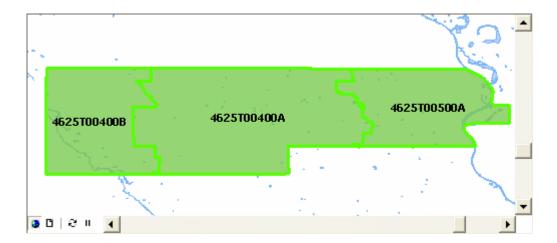


With so many block groups falling outside the thresholds it is apparent that some will need to be merged. After choosing a current work district (in this example tract 4625T00400C), the tribal block group correction is begun by using the *Merge Tool* to merge block groups. Two block groups are selected (in blue outline) for merging in the image below.



After merging block groups until thresholds are met, as shown by block groups outlined in green, it may be necessary to continue the delineations using the *Assign Geography* tool.

The participant's intended delineation of tribal block groups is pictured below. Notice the heavy green outlines symbolizing that all tribal block groups have met the established population and housing unit thresholds.

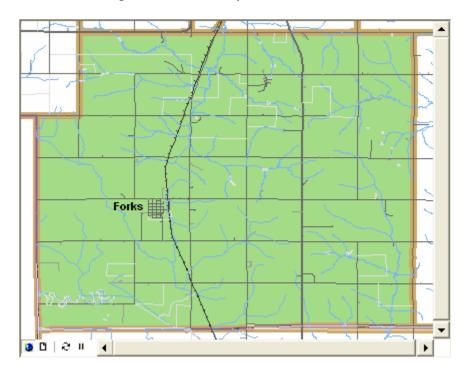


C.3 Verifying Census Designated Places (CDPs)

Your review should begin by examining the CDPs that exist on the materials provided. If you see the need to make corrections to CDPs, or to add one that was previously submitted but not shown on the materials provided, use the scenarios below to help you.

Creating New CDPs

In the following scenario the participant intended for a new CDP to be created for the unincorporated community of Forks. The unincorporated community of Forks on an AIR is labeled in the image below.



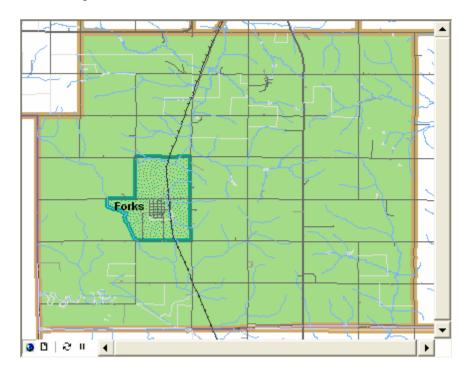


A new CDP is added to the shapefile with the *TSAP Geography Manager* tool (left image). *Census Designated Places* and *All* are selected respectively as the work layer and update type. After choosing *New District* for the current work district, the *New District Parameters* window pops-up (see first image next page).

In the New District Parameters window, Forks is typed as the CDP name.



To begin a new CDP, area must be added to the project with the *Assign Geography* tool. A new CDP is initially an empty record and requires the addition of census blocks before it will be visible in the view. A potential delineation for the Forks CDP is symbolized by a heavy green outline and green stipple fill pattern in the image below.



Many tribes have population living in a community with a locally recognizable name outside the boundary of their reservation. To inquire about CDPs off your AIR/ORTL, please contact your RCC who will help you coordinate with the appropriate PSAP participant.

Working with Existing CDPs

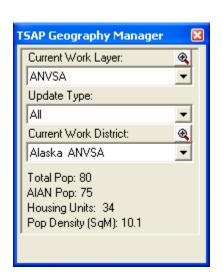
If a CDP is present by not accurately represented in the Census Bureau's database, you may modify the name or revise the boundary. Name changes are processed through the CDP component of the *QC Tool* (please refer to Section D), so even if no geographic area changes are made, the *QC Tool* provides a function to review and modify CDP names. The boundaries of CDPs are modified using the *Assign* and *Unassign* Geography tools, as covered in Section D. However, if you select a block to assign to a CDP that is already part of another CDP or incorporated place a message box will appear to notify you (see image below).

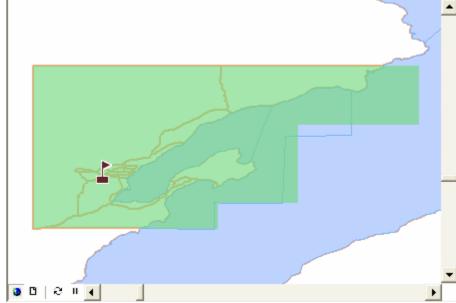


If you do in fact intend to include a portion of an existing CDP into your new CDP delineation, select *Yes*. Please report to your RCC if this situation occurs (see *Appendix 1* to find your RCC's contact information).

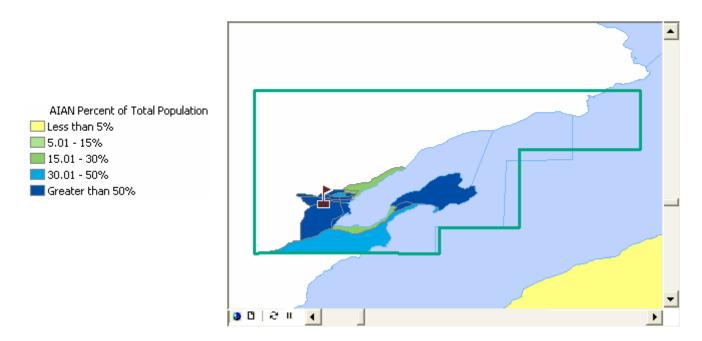
C.4 Verifying Alaska Native Village Statistical Areas (ANVSAs)

The process for verifying your ANVSA should begin with a review and inspection of the current Census ANVSA boundary and the point location of your Alaska Native village as well as the AIAN percent of total population of your ANVSA reported for the 2000 Census. After opening the *TSAP Geography Manager* tool, *ANVSA* and *All* are respectively selected as the work layer and update type. In the example below, the fictional *Alaska ANVSA* has been chosen as the current work district and its demographic data are listed beneath. Notice the extent and size of the census blocks (light orange boundary lines) in relation to the 2000 Census ANVSA (transparent green fill). The point location of the ANV is symbolized with a flag.

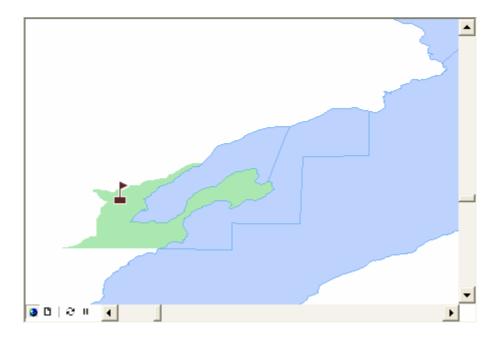




Utilizing the *Toggle Block Symbology* tool, an additional perspective of the American Indian and Alaska Native (AIAN) population per census block is displayed (see below image). Most noticeably the current Census ANVSA boundary contains several large uninhabited census blocks covering both land (areas in white) and adjacent water features. (The current Census ANVSA boundary is symbolized with a heavy green line.) An ANVSA with a total AIAN population percentage of 30% or greater is recommended for statistical purposes.



The corrected ANVSA boundary eliminates the large uninhabited census blocks and results in a more spatially concise and intended representation of the ANVSA's population (see image below). The new ANVSA boundary was achieved by removing census blocks with the *Unassign Geography* tool. Compare the new ANVSA boundary (visible by the green shaded area) with the old Census ANVSA boundary found on the previous page.



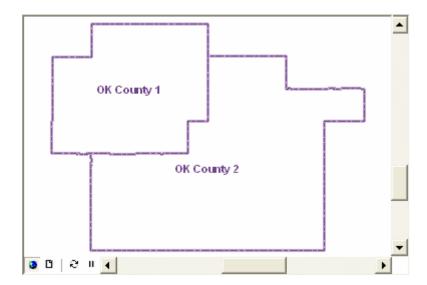
C.5 Verifying Oklahoma Tribal Statistical Area (OTSA) Tribal Subdivisions

Working with Existing OTSA Tribal Subdivisions

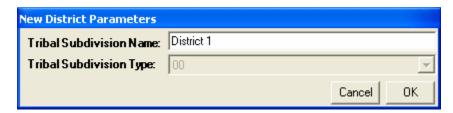
Existing OTSA tribal subdivisions should be reviewed and adjusted as needed. The *Assign geography* tool, *Unassign geography* tool, all found on the *TSAP Tools* toolbar and explained in Section D, will be useful in census block based adjustments to your OTSA tribal subdivision delineations.

Correcting OTSA Tribal Subdivisions

In the following example new OTSA tribal subdivisions are developed using existing county boundaries and 2000 Census blocks with the *Assign geography* tool. The image below contains the spatial extent of the two counties which will serve as building units for correcting OTSA tribal subdivisions.



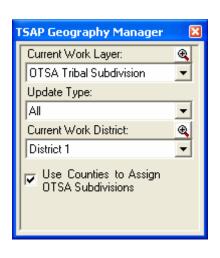
Using the *TSAP Geography Manager* tool select *OTSA Tribal Subdivision* as the current work layer to begin the delineation process. You will immediately be prompted with the *New District Parameters* window to identify the OTSA tribal subdivision (see image below). A *Tribal Subdivision Name* is typed in the text box provided.

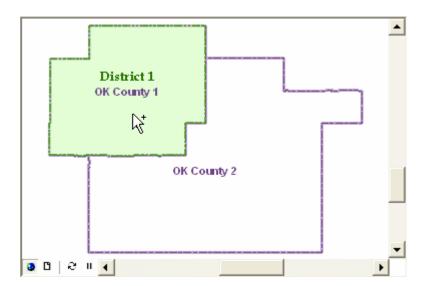


The name of the new district will then be displayed as the current work district in the *TSAP Geography Manager* (see below left image). The *Assign Geography* tool may be used to assign area by county boundary or 2000 Census block. By default the *Assign Geography* tool is set to use 2000

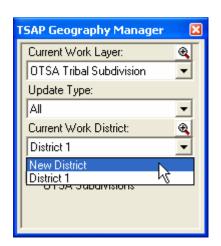
Census blocks for assignment. If you prefer to use counties be certain to check the *Use Counties to Assign OTSA Subdivisions* option box in the the *TSAP Geography Manager*.

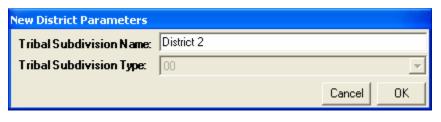
In the example below the area from *OK County 1* has been assigned to *District 1* using the *Assign Geography* tool. Notice that the *Use Counties to Assign OTSA Subdivisions* option box has been checked so that the area of *OK County 1* was assigned to *District 1* with a single click.



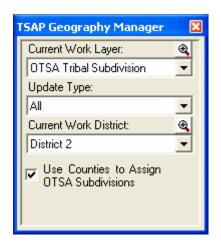


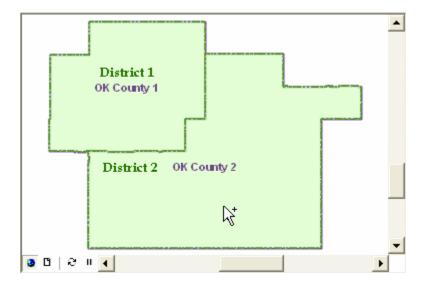
A second *OTSA Tribal Subdivision* is created by selecting *New District* as the current work district (see below left image). Again, the *New District Parameters* window will appear prompting you to enter a name for the new district (see below right image). Please enter the full administrative name of the subdivision. For example, if the Tribal Subdivision is referred to as *District 2* in official tribal documentation, please type in *District 2*.



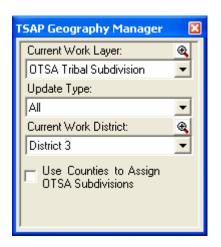


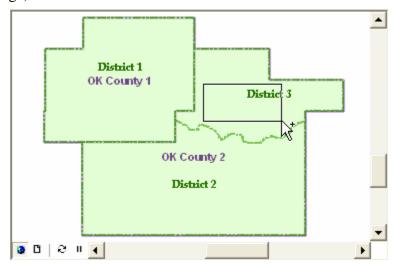
When switching to another work district be certain the current work district in the *TSAP Geography Manager* is correctly selected (see below left image). The area of *OK County 2* is added to *District 2* with the *Assign Geography* tool (see below right image).





A third district, not based upon county boundaries, but upon 2000 Census blocks is added to finish this OTSA tribal subdivision example. Following the directions for creating a new work district explained above, *District 3* is created. After turning off the *Use Counties to Assign OTSA Subdivisions* option box - so that area will be assigned by 2000 Census blocks - the *Assign Geography* tool is used with a marquee selection (see below right image).



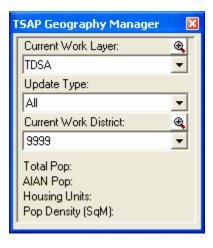


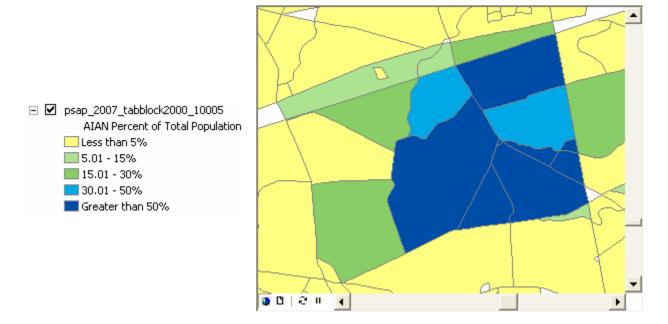
C.6 Verifying Tribal Designated Statistical Areas (TDSAs)

The delineation process begins with the selection of TDSA as the current work layer in the TSAP Geography Manager. After the update type of All is selected the current work district will

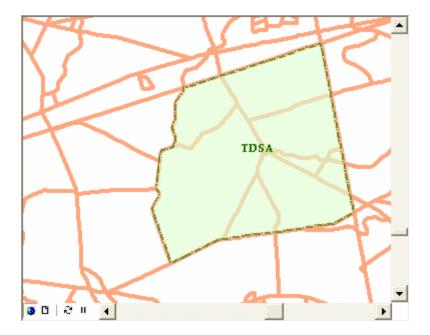
automatically display the four digit census code for your area (see right image).

After locating the general area for which you are considering your TDSA correction, it is recommended that you review the existing census block data. Using the *Toggle Block Symbology* tool, activate the AIAN percent of total population symbology. This will allow you to identify the blocks with a 30 percent or greater AIAN percent of the total population. In the example pictured below a distinct pattern of census blocks with a 30 percent or higher AIAN population is visible. A TDSA with a total AIAN population percentage of 30 percent or greater is recommended for statistical purposes.





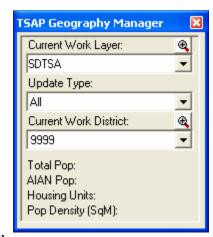
In this scenario a new TDSA is delineated with the *Assign Geography* tool by clicking once on each block that will comprise the TDSA. The finalized TDSA delineation is displayed in the image below (census blocks are shown with default symbology).



Note that the Census Bureau does not anticipate participants delineating new TDSAs during the verification phase of the program, unless the participant submitted a TDSA during the delineation phase that was not inserted into our database. However, the assign geography tool can also be used to make corrections to existing TDSAs as needed.

C.7 Verifying State Designated Tribal Statistical Areas (SDTSAs)

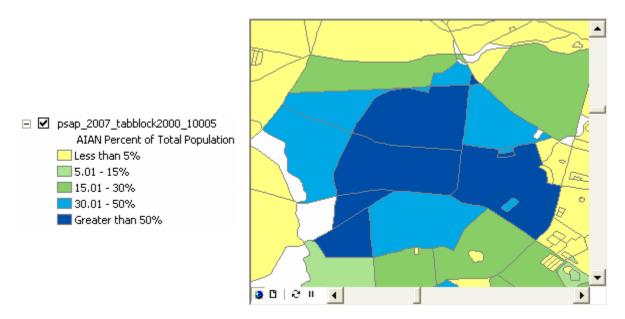
The verification process begins by selecting the *SDTSA* as the current work layer in the *TSAP Geography Manager*. After the update type of *All* is selected, the current work district will automatically display the four digit census code for your area (see right image). As in the example image, population and housing unit data will be blank when delineating a completely new SDTSA.



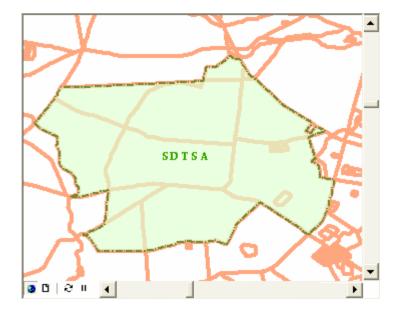
After locating the general area for which you are considering your SDTSA delineation, it is recommended that you review the existing census block geography. Using the *Toggle Block Symbology* tool,

activate the AIAN percent of total population symbology. This will allow you to identify the blocks with a 30% or greater AIAN percent of the total population.

In the example image below a distinct pattern of census blocks with a 30 percent or higher AIAN population is visible. An SDTSA with a total AIAN population percentage of 30 percent or greater is recommended for statistical purposes.



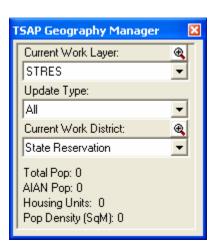
In this scenario a new SDTSA is delineated with the *Assign Geography tool* by clicking once on each block that will comprise the SDTSA. The finalized SDTSA delineation is displayed in the image below (census blocks are shown with default symbology).



Note that the Census Bureau does not anticipate participants delineating new SDTSAs during the verification phase of the program, unless the participant submitted an SDTSA during the delineation phase that was not inserted into our database. However, the assign geography tool can also be used to make corrections to existing SDTSAs as needed.

C.8 Verifying State American Indian Reservations

In the following example delineation scenario an existing state AIR boundary is updated to include additional legally defined land. The delineation process begins with the selection of *STRES* as the current work layer in the *TSAP Geography Manager*. After the update type of *All* is selected the current work district will automatically display the name of the state AIR to be delineated (see right image).



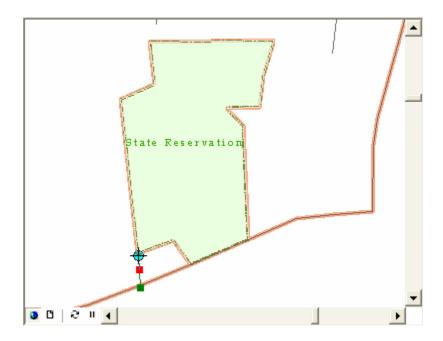
Next the spatial extent of the State AIR and existing census block geography are reviewed. The existing State AIR (light green fill) and census blocks (heavy orange lines) are pictured below.



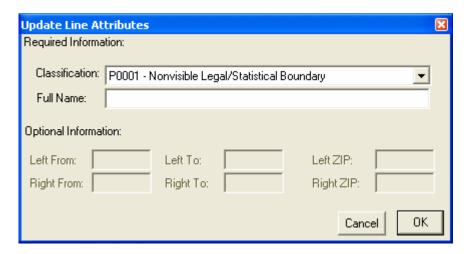
Upon comparing the Census Bureau's depiction of the State AIR boundary to a reliable state document a difference is noted. In some cases the area that needs to be added may be a whole block and you can use the *Assign geography* tool to accomplish the task. In this example, it is apparent that a new line must be added to correctly depict the state AIR boundary. This is accomplished by starting a line edit session with the *Census Editing Tools* toolbar (see below image).



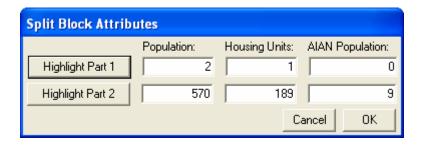
Once the edit session is active, use the *Sketch tool* to add your new line feature (see first image next page).



After completing the new line feature with a double click, the *Update Line Attributes* message box will pop-up (see below image). The default *Classification* is the *Nonvisible Legal/Statistical Boundary* type; other types may be found in the pull down menu. *OK* is clicked once to continue.



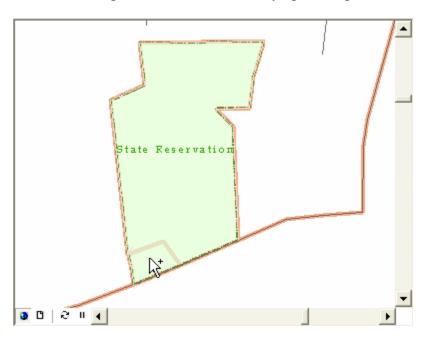
After choosing a *Classification* type, the *Split Block Attributes* window appears offering an opportunity to utilize local knowledge while assigning population to the new blocks (see below image).



The new area is pictured in the below image.



After ending the line edit session, the new area must be assigned to the State AIR boundary with the *Assign geography* tool. The completed state AIR boundary update is pictured below.



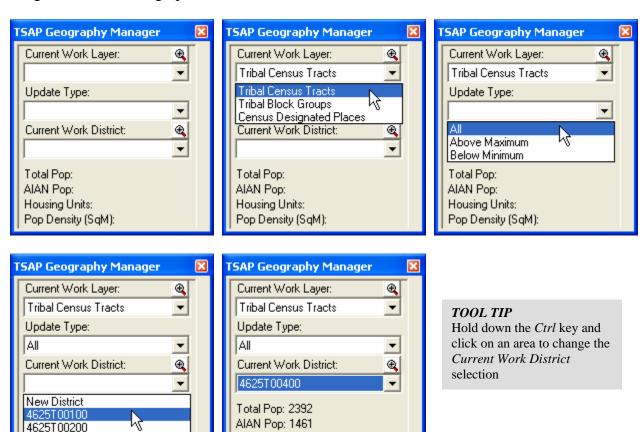
D. Using the Extension

The TSAP Extension features tools and commands are useful in the identification, delineation, and review of your statistical areas. This section presents details on how these tools/commands can be used to accomplish the core tasks of the mapping process. The administrative *Geography Manager* and *Workflow Manager* are presented first, followed by editing tools and the quality control tools.

D.1 TSAP Geography Manager

4625T00300 4625T00400

The *TSAP Geography Manager* tool allows you to identify and select with pull-down menus a work layer, update type, and work district. A work layer specifies the entity type you will be delineating, for example: tribal census tracts, Alaska Native village statistical areas, census designated places, etc. A work district further specifies a particular feature of the work layer such as an individual tribal census tract. The update type menu allows you to narrow your work districts to those features above or below population and/or housing unit thresholds (applicable only when working with tribal census tracts, tribal block groups, and census designated places). The *TSAP Geography Manager* is activated by clicking once on the *Show/Hide TSAP Geography Manager* button in the *TSAP Management* toolbar. In the series of example images below a work layer, update type, and work district are selected. In the final image notice the demographic data visible once a work district is selected.



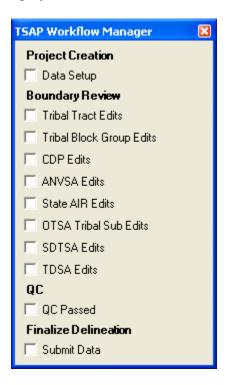
Housing Units: 797

Pop Density (SqM): 14.0

D.2 Workflow Manager

The Workflow Manager presents an outline of the major tasks associated with delineating your statistical areas and offers a tool for you to monitor the progress of your project work. It is activated by clicking once on the Show/Hide Workflow Manager button on the TSAP Management Toolbar. Before your project is started the manager will appear blank as shown in the below left image. As you work through your project, review and delineation tasks will automatically become checked as they are completed. For example, after you start a project and the necessary datasets are assembled, the Data Setup task will become checked (see below right image).

Once your project is set up, the *Workflow Manager* will display the area types eligible for delineation as determined by your tribe's delineation eligibility. In the example shown in the below right image, the tribal participant is eligible to delineate tribal tracts, tribal block groups, and CDPs. Therefore all other area types are grayed out and disabled.

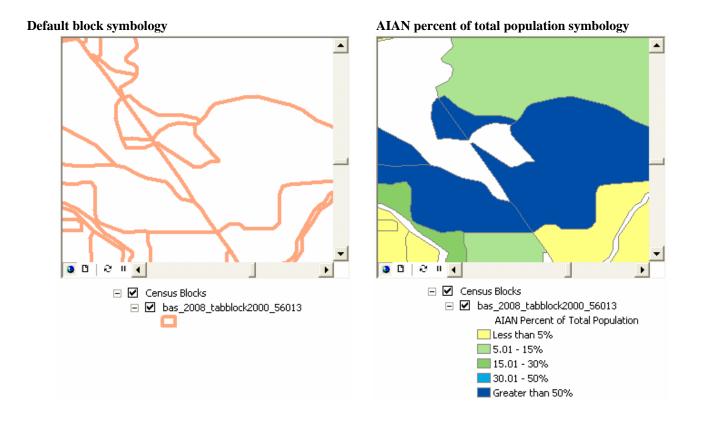




D.3 Working with Census Blocks

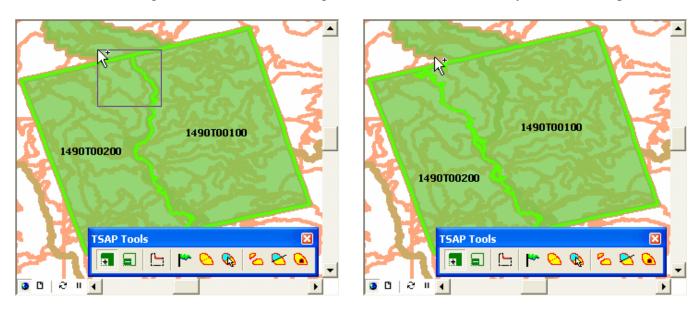
The census block is the smallest unit of census geography. The TSAP extension makes use of existing census block geography generated from the 2000 Census. Census 2000 block geography is provided for reference in your delineations because it is the most recent area representation of population and housing unit counts available. Following the completion of the TSAP statistical area delineations for the 2010 Census, the Census Bureau will generate an entirely new set of block boundaries that will nest within the statistical areas you delineate. It is the newly generated block boundaries that will be the most accurate representation of your area's 2010 Census population.

Several of the tools described later in this section present methods used to assign and unassign blocks to an entity, as well as methods of splitting blocks. However, it is important to understand which blocks you may want to include or exclude from your area or to modify for your delineations, as based upon the Census 2000 AIAN percent of total population. The *Toggle Block Symbology* tool, found in the *TSAP Management* toolbar, is intended to aid you in this process. The default block symbology is a heavy orange outline (see below left image). Click once on the *Toggle Block Symbology* button and the block symbology will switch to a graduated color fill corresponding to the AIAN percent of total Census 2000 population for each block (see lower right image). In the *Table of Contents*, you will also notice that the legend switches as shown in the below images. Blocks without population will appear without a fill color or boundary when in the AIAN percent of total population symbology. Click the *Toggle Block Symbology* button again to return to the default block symbology.



D.4 Assigning and Unassigning Geography to and from Your Area

The Assign and Unassign Geography tools in the TSAP Tools toolbar allow you to spatially add and subtract Census 2000 blocks to/from your statistical areas. In the following example many blocks are assigned to tract 1490T00100 using a marquee selection. First the Assign Geography button is clicked once, making the tool active (you will notice a modified cursor when the tool is active). The cursor is then clicked and dragged over the blocks to be assigned. Blocks may also be selected individually by clicking once directly on the block you wish to assign. It is highly encouraged that you assign blocks rather than unassign blocks when delineating your statistical areas; however the Unassign Geography tool may be used when necessary. Using the Unassign Geography tool does not reassign blocks to another feature but rather removes the blocks entirely from any feature. This process could result in unassigned areas that will be caught and corrected in the Quality Control (QC) process.

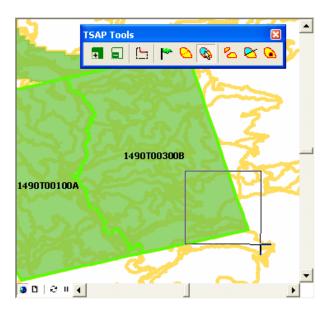


TOOL TIP

More than one block can be assigned or unassigned at one time. Use a standard rectangular marquee selection or while holding down the *Shift* key freehand sketch a polygon that contains the blocks you wish to assign or unassign.

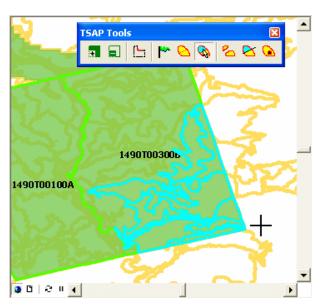
D.5 Splitting Tribal Census Tracts and Tribal Block Groups by Block Selection (applies only to Federally recognized tribes with AIRs/ORTLs)

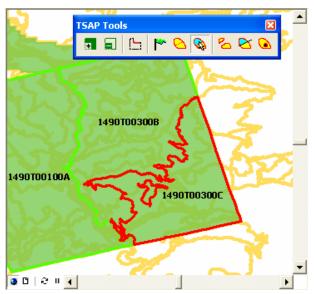
Splitting tribal census tracts and tribal block groups is a convenient method for creating new tribal census tracts and tribal block groups. The *TSAP Tools* toolbar offers a unique solution with the *Split by block selection tool*. This tool is activated by clicking once on the *Split by block selection tool* button. Once the tool is active, click and drag the crosshair cursor over the Census 2000 blocks of interest to make a block selection. In the left image below a rectangular marquee selection has been made to split a block group. The right image displays the selected blocks (highlighted in blue).



If your block selection is complete, double click anywhere to continue the split process. A message window (shown below) will prompt you to confirm your block selection. After clicking *Yes*, the existing block group is split yielding a new tract (see right image).



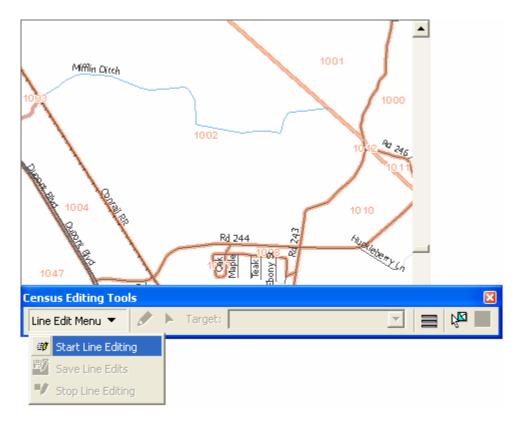




D.6 Splitting Blocks with Existing Line Features

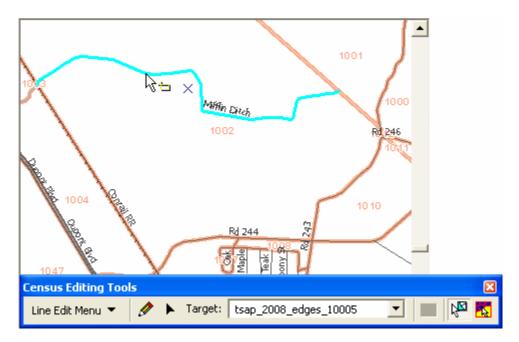
Blocks are most often defined by visible linear features such as roads, shorelines, rivers, power lines, et cetera, as well as by governmental unit boundaries that are frequently not visible. When working with the Census 2000 blocks you may need to split blocks to accommodate your statistical area delineations. Splitting Census 2000 blocks is also considered an opportunity to suggest Census 2010 block boundaries that upon review may be utilized by the Census Bureau when generating the new 2010 block boundaries.

The *Census Editing Tools* toolbar offers unique line editing tools to accomplish the process of splitting Census 2000 blocks with existing line features (as found in the *Line Features Group Layer* in your ArcMap project). If a linear feature is not represented in the dataset you may also sketch in that feature using the line editing tools. You may also need to add a feature extension or a new line if an existing line feature does not entirely split a block. This will be covered in the next section, *Splitting blocks with new line features*.

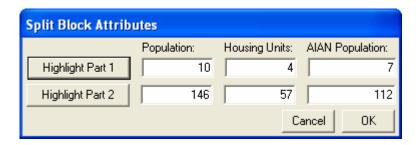


Begin the block splitting process by clicking on the *Line Edit Menu* pull down of the *Census Editing Tools* toolbar and selecting the *Start Line Editing* command (see image above). If ArcMap's *Editor* toolbar is already in use, the *Target layer* pull-down menu may be found there rather than on the *Census Editing Tools* toolbar. If your project contains more than one county, be certain that your *Target Layer* is the edge shapefile for the correct county.

Line features that will be used to split the block are selected with the *Select Features tool* . In this example, Mifflin Ditch has been selected to split block 1002 (see image below).

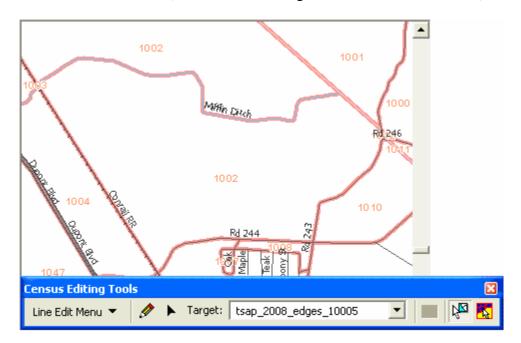


With the line features selected, click once on the *Split Block Tool* button. A *Split Block Attributes* window (see image below) will pop-up containing the tabulated total population, housing units, and AIAN population for the two blocks generated by the split block operation. The tabulated statistical data contained within the window is based upon 2000 Census data and automatically calculated by area. Use the *Highlight Part 1* and *Highlight Part 2* buttons to spatially identify the two new blocks. Local knowledge may be used to adjust the new blocks' population, housing units, and AIAN population by clicking inside the cell of interest and typing. Notice the data cells of the other block will adjust automatically as you change the population values in the *Split Block Attributes* window.

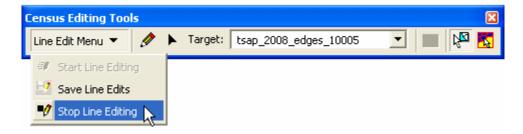


After the data cells have been adjusted as needed, *OK* is clicked to proceed and finalize the block splitting process.

The two new blocks and the block boundary are now visible and symbolized appropriately. Because you are not actually changing Census 2000 blocks but rather beginning to define Census 2010 blocks, the block labels will remain the same (i.e. the two resulting blocks have the same label).



When finished splitting blocks, deactivate the line edit session and save your work by selecting *Stop Line Editing* in the *Line Edit Menu* (see image below). A message window will then appear prompting you to save or cancel your changes.

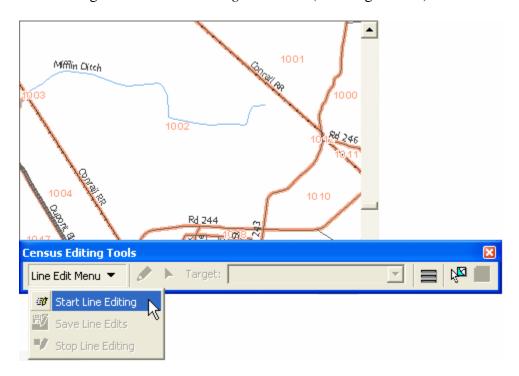


D.7 Splitting Blocks with New Line Features

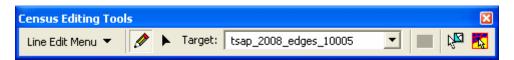
In the following example, block 1002 will be split using the Mifflin Ditch because there is a desire to make the ditch a block group boundary. However, unlike the previous section, in this example the Mifflin Ditch line feature does not completely cross the entire block. While it is recommended that existing features be used to split blocks, small "feature extensions" may be added to complete the splitting line feature. Such feature extensions may follow lines of sight or convenience when no other feature is available to better enclose an area. The feature extension added in this example connects Mifflin Ditch to Conrail Railroad. If possible, "feature extensions" should be no longer than 300 feet in length. The Census Bureau also stresses that line feature additions will be accepted through the TSAP only if they serve as boundaries. Feature extensions are not permitted to connect to non-visible boundaries.

When establishing a boundary that is within 30 feet (10 meters) of an existing line in the Census Bureau's shapefile do not add an additional line. Instead use the existing line features wherever possible.

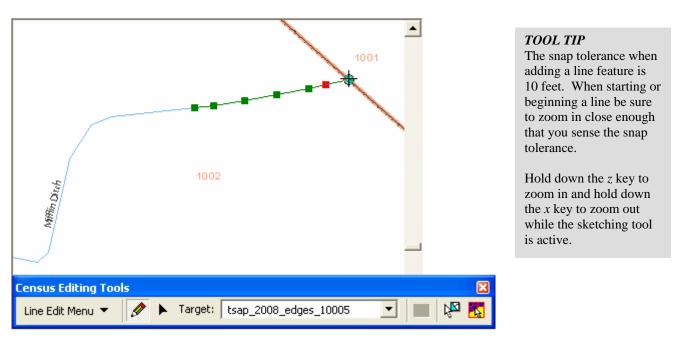
The block splitting process is begun by clicking on the *Line Edit Menu* pull down of the *Census Editing Tools* toolbar and selecting the *Start Line Editing* command (see image below).



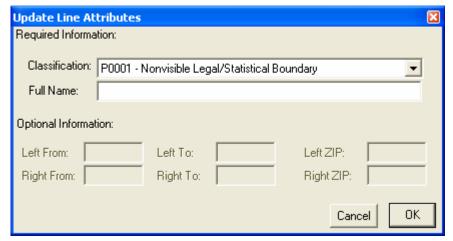
After the line editing toolbar is activated make certain the correct line features shapefile is the *Target layer*. If ArcMap's *Editor* toolbar is already in use, the *Target layer* pull-down menu may be found there rather than the *Census Editing Tools* toolbar.



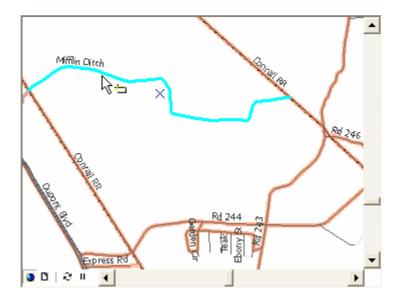
Because in this example Mifflin Ditch does not entirely cross block 1002, it is necessary to add a feature extension from the end of Mifflin Ditch to Conrail Railroad, a visible feature. A feature extension is added by first clicking on the *Sketch Tool* button. Once activated, the *Sketch Tool* cursor is located over the end of the Mifflin Ditch and clicked once to begin the line. Be sure to zoom in very close to make sure the new feature snaps properly to the existing feature both at the start and end of the line. All subsequent vertices are added by single clicks. The feature extension is ended with a double click. Again, zoom in to make sure the end properly snaps to the existing features.



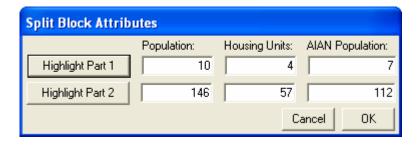
After the feature extension is ended, a line attributes window will pop-up (see image below). In the *Classification* pull-down the type is selected. The default class for new line features is P0001 – Nonvisible Legal/Statistical Boundary. If a line feature is being added that represents an actual visible physical feature, please select the appropriate class code. A full name is required for road features only, but is recommended for all new features. Address ranges may be optionally included by State Reservation Program participants when adding new street features that intersect the boundary of their reservation.



Next, all line features that will be used to split the block are selected with the *Select Features tool*. In this example, Mifflin Ditch and the new feature extension line have been selected (see image below).

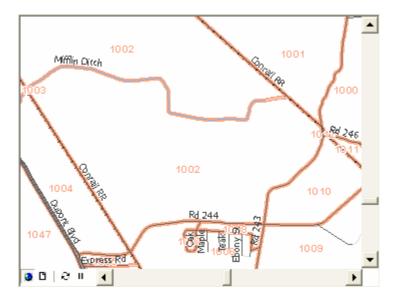


With the line features selected, click once on the *Split Block Tool* button. A *Split Block Attributes* window (see image below) will pop-up containing the tabulated total population, housing units, and AIAN population for the two blocks generated by the split block operation. The tabulated statistical data contained within the window is based upon 2000 Census data and automatically calculated by area. Use the *Highlight Part 1* and *Highlight Part 2* buttons to spatially identify the two new blocks. Local knowledge may be used to adjust the split blocks' population, housing units, and AIAN population by clicking inside the cell of interest and typing. Notice the data cells of the other block will adjust automatically.

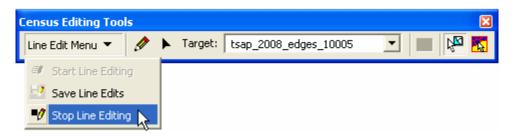


After the data cells have been adjusted as needed, OK is clicked to proceed and finalize the block split process.

The two new blocks and the block boundary are now visible and symbolized appropriately. Because you are not actually changing Census 2000 blocks but rather beginning to define Census 2010 blocks, the block labels will remain the same (i.e. the two resulting blocks have the same label).

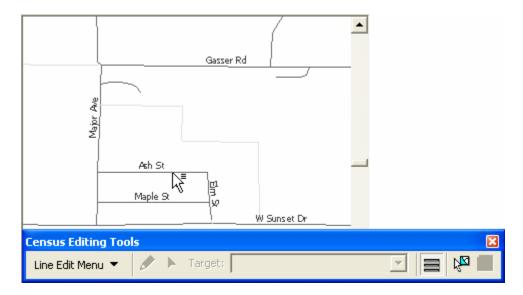


When finished splitting blocks deactivate the line edit session and save your work by selecting *Stop Line Editing* in the *Line Edit Menu*. A message window will then appear prompting you to save or cancel your changes.



D.8 Line Attributes Tool

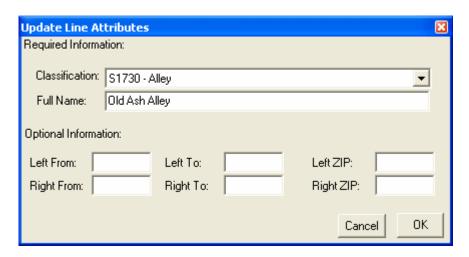
The attributes of individual line segments may be updated with the *Line attributes tool*, including the name, type of feature (i.e. classification), address range and ZIP code range (optional for State Reservation Program [SRP] participants adding street features). The tool is activated by clicking once on the *Line attributes tool* button included in the *Census Editing Tools* toolbar. The tool's selection cursor is then located over the line feature to be updated and clicked once. In the example below, Ash Street is being selected.



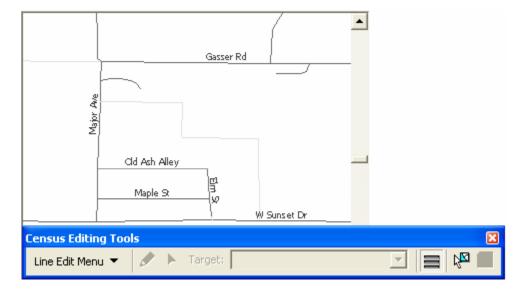
Once a line feature has been selected the *Update Line Attributes* window will pop-up displaying the existing attributes for Ash Street (image below).



The classification is changed by selecting a type from the pull-down menu. A name for the feature is added in the *Full Name* text box. In the example below, Ash Street has been updated to an alley named Old Ash Alley (see image below).

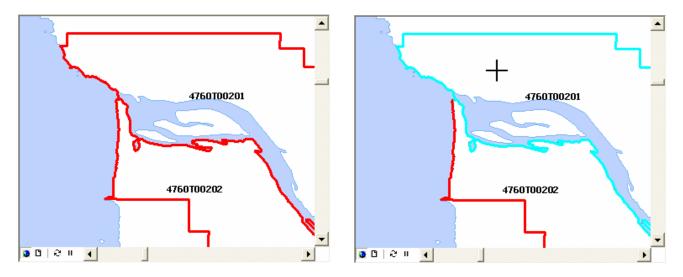


After clicking *OK*, to confirm the line attribute update, your changes will take effect immediately. Notice the new label for Old Ash Alley in the example image below.

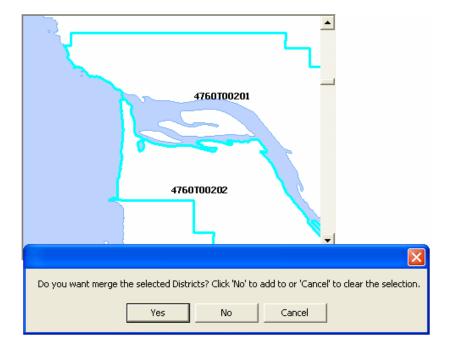


D.9 Merging Tracts and Block Groups

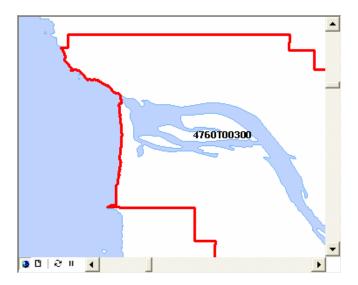
The *Merge Tool* included in the *TSAP Tools* toolbar is used to combine two tribal census tracts or tribal block groups. In the example below two tribal census tracts, 4760T00201 and 4760T00202, that were originally split from the same tract (as by the T002 tract code and their two character suffixes) will be merged to reform one new tribal census tract. The merge function is activated by clicking once on the *Merge Tool* button. The crosshair cursor is then positioned over one of the two tracts and clicked once selecting the first feature (see below right image).



The selection process is then repeated for the second feature to be merged. After the second selection a message window will pop-up to confirm or cancel the merge process.

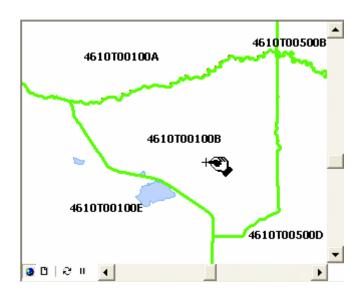


With the merge process complete a new tribal census tract with a new unique code is displayed (see below image).



D.10 Updating Type Attributes for Tribal Tracts and Tribal Block Groups

Tribal tracts and tribal block groups may contain features such as parks, schools, group quarters, water features, etc. that influence or change the usefulness of statistical data being reported for your area. In some cases it is useful to isolate these areas as *special use* tracts and block groups. In the event that separate *special use* tracts or block groups are created to enhance your delineations, the *Tract/BG type tool* found on the *TSAP Tools Toolbar* may be used to assign attribute types to those areas. The tool is activated by clicking once on the *Tract/BG type tool* button. The cursor is then positioned over the area of interest and clicked once. In the example below the cursor has been placed over block group 4160T00100B.



The *Select Type* pop-up window will appear following your selection (see below image). The ID field will remain disabled and you will need to only select a type from the pull-down menu. In the example below the *P-Park* type has been selected. Click *OK* to proceed and finish the process.



Appendix 1. Regional Census Center's Contact Information *See Appendix 1 to determine which RCC serves your tribe.*

Alabama Florida	Atlanta RCC: Geography 285 Peachtree Center Avenue NE Marquis II Tower, Suite 1000 Atlanta, GA 30303-1230 Phone: (404) 332-2711 Fax: (404) 332-2787 E-mail: atlanta.geography@census.gov	Detroit RCC: Geography 300 River Place Drive, Suite 2950 Detroit, MI 48207 Phone: (313) 396-5002 Fax: (313) 567-2119 E-mail: detroit.geography@census.gov	Michigan Ohio West Virginia
Vermont New Hampshire Massachusetts Rhode Island Connecticut	Boston RCC: Geography One Beacon Street, 7th Floor Boston, MA 02108-3107 Phone: (617) 223-3600 Fax: (617) 223-3675 E-mail: boston.geography@census.gov	Kansas City RCC: Geography 2001 NE 46th Street, Suite LL100 Kansas City, MO 64116-2051 Phone: (816) 994-2020 Fax: (816) 994-2033 E-mail: kansas.city.geography@census.gov	lowa Kansas Missouri Oklahoma Arkansas
Kentucky Tennessee North Carolina South Carolina	Charlotte RCC: Geography 3701 Arco Corporate Drive, Suite 250 Charlotte, NC 28273 Phone: (704) 936-4200 Fax: (704) 936-4225 E-mail: charlotte.rcc.geography@census.gov	Los Angeles RCC: Geography 9301 Corbin Avenue, Suite 1000 Northridge, CA 91324-2406 Phone: (818) 717-6701 Fax: (818) 717-6778 E-mail: los.angeles.geography@census.gov	Southern California Hawaii
Wisconsin /	Chicago RCC: Geography 500 West Madison Street, Suite 1600 Chicago, IL 60661-4555 Phone: (312) 454-2705 Fax: (312) 488-1510 E-mail: chicago.geography@census.gov	New York RCC: Geography 330 West 34 th Street, 13 th Floor New York, NY 10001-2406 Phone: (212) 971-8800 Fax: (212) 971-8990 E-mail: new.york.rcc.geography@census.gov	Pennsylvania New York New Jersey New York Region
Mississippi Texas Louisiana	Dallas RCC: Geography 2777 N Stemmons Freeway, Suite 200 Dallas, TX 75207 Phone: (214) 267-6920 Fax: (214) 267-6970 E-mail: dallas.geography@census.gov	Philadelphia RCC: Geography 1234 Market Street, Suite 340 Philadelphia, PA 19107-3780 Phone: (215) 717-1000 Fax: (215) 253-8001 E-mail: philadelphia.geography@census.gov	Pennsylvania New Jersey Delaware Washington D.C. Maryland
Montana North Dakota South Dakota Nevada Utah Colorado Arizona New Mexico	Denver RCC: Geography 6950 W Jefferson Avenue, Suite 250 Lakewood, CO 80235-2032 Phone: (720) 475-3600 Fax: (720) 962-4606 E-mail: denver.rcc.geography@census.gov	Seattle RCC: Geography 19820 North Creek Parkway N, Suite 100 Bothell, WA 98011 Phone: (425) 908-3010 Fax: (425) 908-3020 E-mail: seattle.geography@census.gov	Alaska Washington Oregon Northern California